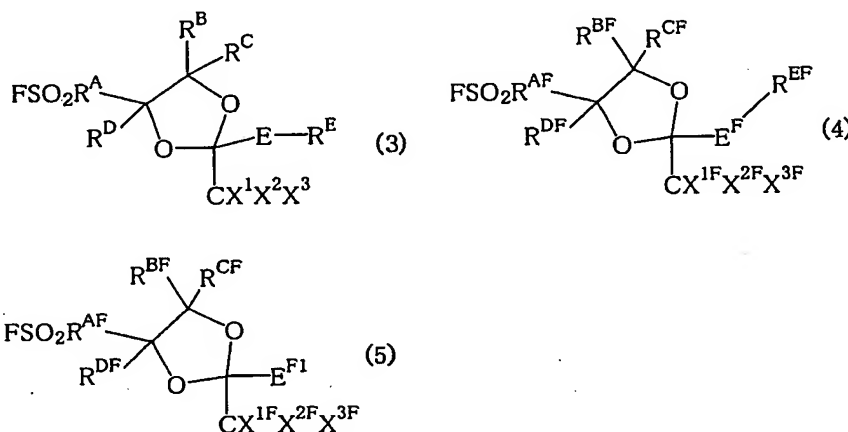




# AMENDMENTS TO THE CLAIMS

Claim 1 (Withdrawn): A process for producing the following fluorosulfonyl group-containing compound (5), characterized in that the following compound (3) is fluorinated to form the following compound (4), and then, the compound (4) is subjected to a decomposition reaction:



provided that the symbols in the formulae have the following meanings:

at least one selected from  $R^A$  to  $R^E$ ,  $X^1$  to  $X^3$  and  $E$  is a hydrogen atom or a group having hydrogen atom(s), and at least one selected from  $R^{AF}$  to  $R^{EF}$ ,  $X^{1F}$  to  $X^{3F}$  and  $E^F$  is a fluorinated group or a fluorine atom;

$R^A$ : a bivalent organic group;

$R^{AF}$ : a group corresponding to  $R^A$ , i.e. a bivalent organic group having  $R^A$  fluorinated, or the same bivalent organic group as  $R^A$ ;

$R^B$ ,  $R^C$ ,  $R^D$ : each independently being a hydrogen atom, a halogen atom or a monovalent organic group;

$R^{BF}$ ,  $R^{CF}$ ,  $R^{DF}$ :  $R^{BF}$ ,  $R^{CF}$  and  $R^{DF}$  are groups which correspond to  $R^B$ ,  $R^C$  and  $R^D$ , respectively; when any one of  $R^B$  to  $R^D$  is a hydrogen atom, the one of  $R^{BF}$  to  $R^{DF}$  corresponding to the hydrogen atom is a hydrogen atom or a fluorine atom; when any one of

$R^B$  to  $R^D$  is a halogen atom, the one of  $R^{BF}$  to  $R^{DF}$  corresponding to the halogen atom is a halogen atom; when any one of  $R^B$  to  $R^D$  is a monovalent organic group, the one of  $R^{BF}$  to  $R^{DF}$  corresponding to the monovalent organic group is a monovalent organic group having the corresponding one of  $R^B$  to  $R^D$  fluorinated, or the same group as the corresponding one of  $R^B$  to  $R^D$ ;

$R^E$ : a monovalent organic group;

$R^{EF}$ : a group corresponding to  $R^E$ , i.e. a monovalent organic group having  $R^E$  fluorinated, or the same monovalent organic group as  $R^E$ ;

E: a bivalent connecting group;

$E^F$ : a group corresponding to E, i.e. the same bivalent connecting group as E, or a bivalent connecting group having E fluorinated;

$E^{F1}$ : a group formed by scission of  $E^F$ ;

$X^1, X^2, X^3$ : each independently being a hydrogen atom, a chlorine atom, or a fluorine atom;

$X^{1F}, X^{2F}, X^{3F}$ :  $X^{1F}, X^{2F}$  and  $X^{3F}$  correspond to  $X^1, X^2, X^3$ , respectively; when any one of  $X^1$  to  $X^3$  is a hydrogen atom, the one of  $X^{1F}$  to  $X^{3F}$  corresponding to the hydrogen atom, is a hydrogen atom or a fluorine atom; when any one of  $X^1$  to  $X^3$  is a fluorine atom, the one of  $X^{1F}$  to  $X^{3F}$  corresponding to the fluorine atom, is a fluorine atom; and when any one of  $X^1$  to  $X^3$  is a chlorine atom, the one of  $X^{1F}$  to  $X^{3F}$  corresponding to the chlorine atom, is a chlorine atom.

Claim 2 (Withdrawn): The process according to Claim 1, wherein the fluorination reaction is carried out by the reaction with fluorine in a liquid phase.

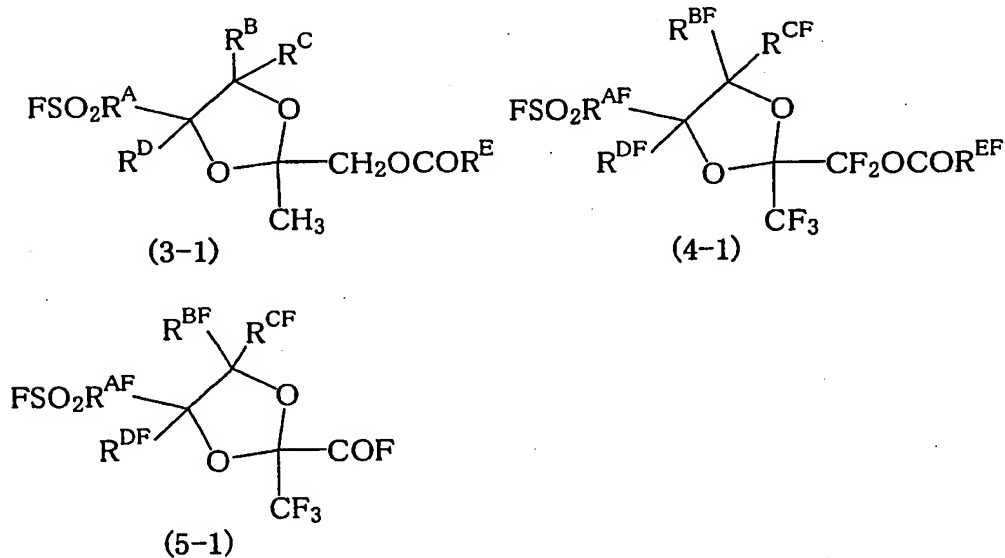
Claim 3 (Withdrawn): The process according to Claim 2, wherein the fluorine content of the compound (3) is from 20 to 86 mass%.

Claim 4 (Withdrawn): The process according to Claim 2, wherein the molecular weight of the compound (3) is from 200 to 1,000.

Claim 5 (Withdrawn): The process according to Claim 1, wherein  $R^E$  is a perfluorinated monovalent organic group, and  $R^{EF}$  is the same group as  $R^E$ .

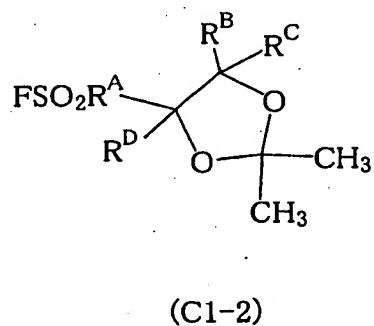
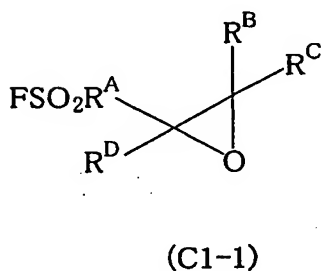
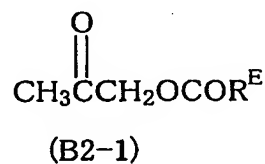
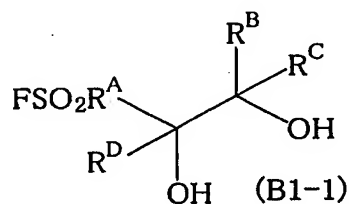
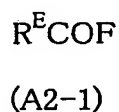
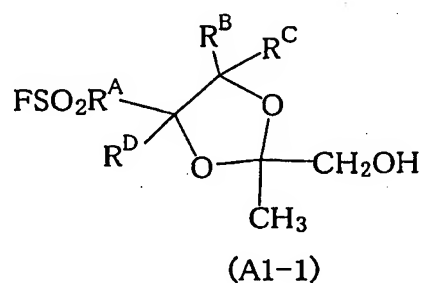
Claim 6 (Withdrawn): The process according to Claim 1, wherein the fluorination is a reaction whereby the compound (3) is substantially perfluorinated.

Claim 7 (Withdrawn): The process according to Claim 1, wherein the compound (3) is the following compound (3-1), the compound (4) is the following compound (4-1), and the compound (5) is the following compound (5-1):



provided that the symbols in the formulae have the same meanings as defined above.

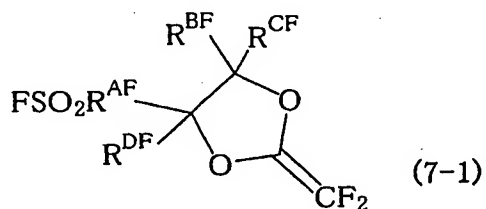
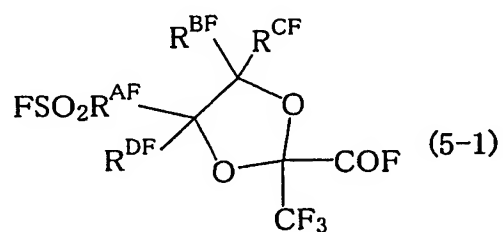
Claim 8 (Withdrawn): The process according to Claim 7, wherein the compound (3-1) is a reaction product of the following compound (A1-1) and the following compound (A2-1), a reaction product of the following compound (B1-1) and the following compound (B2-1), or a reaction product obtained by reacting the following compound (C1-1) with acetone to form the following compound (C1-2) and reacting the compound (C1-2) and the following compound (B2-1):



provided that the symbols in the formulae have the same meanings as defined above.

Claim 9 (Withdrawn): The process according to Claim 8, wherein the compound (3-1) is a compound obtained by reacting the compound (C1-1) with acetone to obtain a reaction product containing the compound (C1-2) and acetone, and using the reaction product as it contains the acetone, for the reaction with the compound (B2-1).

Claim 10 (Withdrawn): A process for producing the following compound (7-1), characterized in that the following compound (5-1) is thermally decomposed:

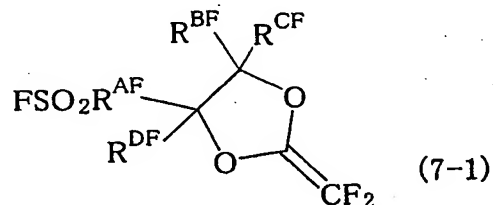


provided that the symbols in the formulae have the same meanings as defined above.

Claim 11 (Previously Presented): A process for producing a fluorosulfonyl group-containing polymer, comprising:

polymerizing at least one member of compound (7-1), or

polymerizing at least one member of compound (7-1) and at least one member of a polymerizable monomer which is copolymerizable with compound (7-1):



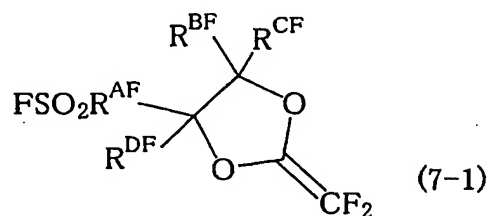
wherein:

$R^{AF}$  is a bivalent organic group

$R^{BF}$ ,  $R^{CF}$  and  $R^{DF}$  are, independently, a hydrogen atom, a halogen atom or a monovalent organic group.

Claim 12 (Previously Presented): A fluorosulfonyl group-containing polymer, comprising:

polymerized monomer units of at least one member of compound (7-1), or  
polymerized monomer units of at least one member of compound (7-1) and monomer units of at least one member of a polymerizable monomer which is copolymerizable with compound (7-1), wherein compound (7-1) is:



wherein:

$R^{AF}$  is a bivalent organic group

$R^{BF}$ ,  $R^{CF}$  and  $R^{DF}$  are, independently, a hydrogen atom, a halogen atom or a monovalent organic group.

Claim 13 (Previously Presented): The fluorosulfonyl group-containing polymer according to Claim 12, which has an average molecular weight of from  $5 \times 10^3$  to  $5 \times 10^6$  and contains from 0.1 to 99.9 mol% of the monomer units having polymerized at least one member of a polymerizable monomer which is copolymerizable with compound (7-1).

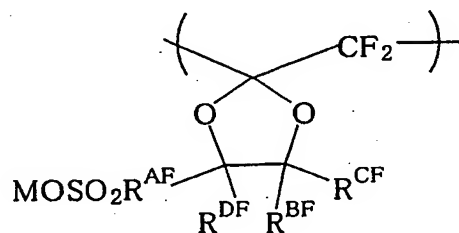
Claim 14 (Currently Amended): A process for producing a sulfonate or sulfonic group-containing polymer, comprising:

subjecting to alkali hydrolysis fluorosulfonyl groups of the fluorosulfonyl group-containing polymer produced by the process of Claim 11, [[s,]]

optionally followed by acid treatment.

Claim 15 (Previously Presented): A fluorosulfonic group-containing polymer comprising:

monomer units represented by the following formula, or  
such monomer units and monomer units of another monomer which is  
copolymerizable with such monomer units:



wherein M is a hydrogen atom or a counter ion, wherein

$\text{R}^{\text{AF}}$  is a bivalent organic group

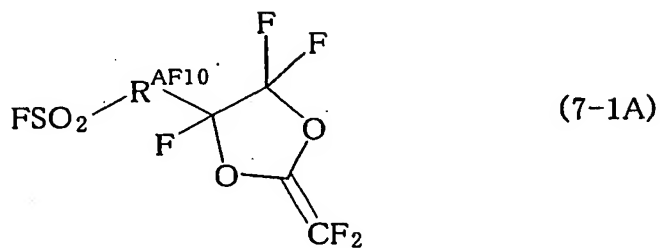
$\text{R}^{\text{BF}}$ ,  $\text{R}^{\text{CF}}$  and  $\text{R}^{\text{DF}}$  are, independently, a hydrogen atom, a halogen atom or a monovalent organic group.

Claim 16 (Previously Presented): The fluorosulfonic group-containing polymer according to Claim 15, which has an average molecular weight of from  $5 \times 10^3$  to  $5 \times 10^6$  and contains from 0.1 to 99.9 mol% of the monomer units of another copolymerizable monomer.



Claim 17 (Previously Presented): A compound represented by the following formula

(7-1A):



wherein  $\text{R}^{\text{AF10}}$  is a  $\text{C}_{1-20}$  perfluoroalkylene group or a  $\text{C}_{1-20}$  perfluoro(etheric oxygen atom-containing alkylene) group.

Claim 18 (Withdrawn): Any one of the compounds represented by the following formulae, wherein  $M^2$  is an alkali metal ion:

